BRUHAT BANGALORE MAHANAGARA PALIKE
YELAHANKA ZONE

Name of the work: **Construction of Moulded drain in Kuvempunagara 1st stage Near Samudhaya Bhavana roads in Ward No. 11, Vidyaranyapura Sub Division.**

			Estimate Cost:						1000000.00
Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
1	KSRRB 300-1.1 : Earthwork excavation by manual means in Hard soil involving an average horizontal throw upto 2 meters and an average lift upto 0.5m excavated surface leveled and sides neatly dressed, the disposed earth to be leveled neatly after breaking of clods complete as per specifications. Specification No. KRBS 300-1 MORT & H Specification No. 301 to 305 (P.149/I.19.1) PWD SR 2011-12	Cum							
	Culvert		1	6.00	2.00	1.20	14.40		
			1	4.50	2.00	1.20	10.80		
	CC Drain		1	75.00	0.90	0.90	60.75		
							85.86	62.86	**5397.00**
	Basic Rate	58.20							
	Area Weightage @8%	4.66							
	Total	**62.86**							
2	KSRB 4-1.3 : Providing and laying in position **plain cement concrete of mix M7.5 with OPC cement @ 180 Kgs** using 40mm and down size graded granite metal, corse aggregates @ 0.85 cum and fine aggregtes @ 0.58cum machine mixed, concrete laid in layers not exceeding 15 cms thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2 (P.12/I.4.3 PWD SR - 2011-12)	Cum							
	Culvert		1	6.00	2.00	0.15	1.80		
			1	4.50	2.00	0.15	1.35		
	CC Drain		1	75.00	0.90	0.15	10.13		
	CC Road at Samudhaya Bhavana		1	16.00	2.20	0.15	5.28		
			1	16.00	2.00	0.15	4.80		
	SSM Drain Bottom		1	110.00	0.60	0.15	9.90		
							33.26	3939.41	**131005.00**
	Basic Rate	3647.60							
	Area Weightage @ 8%	291.81							
	Total	**3939.41**							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
3	KSRB 5.2-3 : Providing and constructing granite / trap / basalt size stone masonry in **foundation cement mortar 1:6**, stone hammered dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specification. KBS 5.1.13 (P.25/I.5.6 PWD SR - 2011-12)	Cum							
	Culvert		2	6.00	0.60	0.75	5.40		
			2	4.50	0.60	0.65	3.51		
							8.64	2827.87	**24433.00**
	Basic Rate	2618.40							
	Area Weightage @ 8%	209.47							
	Total	**2827.87**							
4	KSRB 4-1.6 : Providing and laying in position plain cement concrete of **mix M15 with cement @ 240 kgs with 20mm** and down size graded granite metal coarse aggregates @ 0.878 cum and fine aggregates @ 0.459 cum, machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification. No. KBS 4.1,4.2. **No. 12/ Item No. 4.6/ PWD SR 2011-12**	Cum							
	Culvert		2	6.00	0.60	0.10	0.74		
			2	4.50	0.60	0.10	0.54		
							1.08	4462.34	**4819.00**
	Basic Rate	4131.80							
	Area Weightage @ 8%	330.54							
	Total	**4462.34**							
5	KSRB 15.1.1 Providing flush pointing to square rubble, course or uncoursed stone masonry with **cement mortar 1:3,** 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. (P.119 / I.15.1 PWD SR - 2011-12)	Sqm							
	Culvert		2	6.00		0.75	9.00		
			2	4.50		0.65	5.40		
							14.40	75.84	**1092.00**
	Basic Rate	70.22							
	Area Weightage @ 8%	5.62							
	Total	**75.84**							
6	KSRB 4-6.4: Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for vertical surface such as walls at any thickness, including attached pilasters, buttresses, plinth and string courses cost of all materials, labour complete as per specifications. Specification No. KBS 4.6.2 (P.17 / I.4.31 PWD SR - 2011-12)	Sqm							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
	Culvert		10x2	4.80		0.30	28.80		
			7x2	4.80		0.30	20.16		
			17x2	2.00		0.60	40.80		
	CC Drain		4	75.00		0.75	225.00		
			1	75.00		0.60	45.00		
			2	75.00		0.15	22.50		
							381.51	221.40	**84466.00**
	Basic Rate	205.00							
	Area Weightage @ 8%	16.40							
	Total	**221.40**							
7	KSRB 4.2.2 : Providing and laying in position **reinforced cement concrete of design mix M20 with OPC cement @ 320 Kgs with 20mm** and down size graded granite metal coarse aggregates @ 0.878cum and fine aggregates @ 0.459 cum wuth superplastisier @ 3lts confirming to IS 9103-1999 reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15 cms thick, vibrated for all works in foundation plinth and ground floor level for roof slabs, staircase, lintels, retaining walls, return walls, wall (any thickness) including attached plasters, columns, piers, abutments, pillars, posts, struts, buttresses, string or lacing courses, parapets, coping, bed blocks, anchor blocks, plain window cills, fillets etc., including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.6 **(P.13/I.4.11 PWD SR - 2011-12)**	Cum							
	Culvert		17	1.80	0.60	0.23	3.73		
	CC Drain		1	75.00	0.75	0.15	8.44		
			2	75.00	0.15	0.60	13.50		
	Covering Slab		1	50.00	0.75	0.10	3.75		
							29.42	5296.75	**155830.00**
	Basic Rate	4904.40							
	Area Weightage @ 8%	392.35							
	Total	**5296.75**							
8	KSRB 4.9.2:providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost pf materials, labour, HOM of machinery complete as per specifications. Specification No. KBS 4.6.3 **Page No. 19/ Item No. 4.46/ PWD SR 2011-12**	Qntl							
	Consider 75 KG / Cum		0.75	29.42			22.07		
							22.07	7347.82	**162130.00**
	Basic Rate	6803.54							
	Area Weightage 8%	544.28							
	Total	**7347.82**							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
9	KSRB- 4-1.5 : Providing and laying in position plain cement concrete of **mix M20 with OPC cement @ 300 kgs, with 20mm** and down size graded granite metal coarse aggregates @ 0.64 cum and fine aggregares @ 0.43 cum with superplastisiser @ 3lts confirming to IS9103-1999 reaffirmed-2008, machine mixed, concrete laid in layers not exceeding 15cms, thick, well compacted, in foundation, plinth and cills, including cost of all materials, labour, HOM of machinery, curing complete as per specifications, specification. No. KBS 4.1,4.2, **No. 12/ Item No. 4.5/ PWD SR 2011-12**	Cum							
	For CC Road at Samudhaya Bhavana		1	16.00	1.90	0.10	3.04		
			1	16.00	1.00	0.10	1.60		
							4.65	4989.60	**23202.00**
	Basic Rate	4620.00							
	Area Weightage @ 8%	369.60							
	Total	**4989.60**							
10	KSRRB M300-53. Construction of embankment with approved materials Gravel/Murrum with all lifts and leads, transporting to site, spreading, grading to required slope and compacting to meet requirement Table 300-2 complete as per specifications. which includes cost of gravel / Murrum, watering charges & compaction by vibratory roller) **PWD SR 2011-2012 Bangalore circle Pg No. 156, I No. 19.60**	Cum							
	Samudaya Bhavana Road		1	90.00	5.35	0.25	120.00		
	Beside Govt School Road		1	75.00	5.00	0.25	93.75		
							213.75	146.88	**31396.00**
	Basic Rate	136.00							
	Area Weightage @8%	10.88							
	Total	**146.88**							
11	Providing, laying, spreading and compacting graded stone aggregate to **wet mix macadam** specification including premixing the Material with water at OMC in mechanical mix plant carriage of mixed Material by tipper to site, laying in uniform layers with paver in sub-base / base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications **(P.166/I.20.18) PWD SR - 2011-12.**	Cum							
	Samudaya Bhavana Road		1	90.00	5.35	0.15	72.00		
	Beside Govt School Road		1	75.00	5.00	0.15	56.25		
							128.25	1060.56	**136017.00**
	Basic Rate	982.00							
	Area Weightage @ 8%	78.56							
	Total	**1060.56**							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
2	KSRRB 500-1.1 : Cleaning the existing WBM road surface including removing of binding materials and other foreign matter with wire bushes and small picks, sweeping with brooms or soft brushes and finally dusting with old gunny bags and / or compressed air to receive bituminous treatment including cost of all materials, labour, HOM of machineries, curing complete as per specifications. Specification No. 500-1.3 **(P.171/I.21.1) PWDSR 2011-12**	Sqm							
	Samudaya Bhavana Road		1	90.00	5.35		480.00		
	Beside Govt School Road		1	75.00	5.00		375.00		
							855.00	10.04	**8588.00**
	Basic Rate	9.30							
	Area Weightage @ 8%	0.74							
	Total	**10.04**							
3	KSRRB M500-6: Providing and applying primer coat with bitumen emulsion on prepared surface of granular base including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. MORTH specification NO. 502, **Page No. 171/ Item No. 21.6/ PWD SR 20011-12**	Sqm							
			1	150.00	5.70		855.00		
							855.00	40.59	**34701.00**
	Basic Rate	37.58							
	Area Weightage @ 8%	3.01							
	Total	**40.59**							
4	KSRRB M500-18: Providing and laying **semi dense bituminous concrete** 25mm thick with 100-120 TPH batch type HMP producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder at 4.5 to 5% of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem roller to achieve the desired compaction as per MORTH specifications clause No. 500.8 complete in all respects as per specifications. **With 80/100 grade bitumen, No. 151/ Item No. 21.20.1/ PWD SR 2011-12**	Cum							
	Samudaya Bhavana Road		1	90.00	5.35	0.025	12.00		
	Beside Govt School Road		1	75.00	5.00	0.025	9.38		
							21.38	8882.32	**189860.00**
	Basic Rate	8224.37							
	Area Weightage @ 8%	657.95							
	Total	**8882.32**							

Sl. No	Description	Unit	No.	L	B	D	Qty	Rate	Amount
15	Lead for Disposal of Debris shall be payable at carriage rates by Mechanical means inlcuding loading and unloading. From 0.00 to 2.00 Km (Page No.123)	Cum							
							Vide Item No. 1	85.86	80.14	6880.00
	Average weight of earth 1.28 tonne / kg for 5X1.20X2.00=12.00 4.80	12.00	4.80					72.36	6213.00
	Add loading and unloading Vide item no.17.1 P.no.141	62.20							
		74.20	67.00						
	Area Weightage @ 8%	5.94	8.36						
	Total	80.14	72.36						752.00 840.00
16	Miscellaneous and other Charges	L/S							902.00 918.00
								Total	**1000000.00**

(Rs. Ten Lakhs Only)

CERTIFICATE:

1 The work spot has been inspected and the work is found necessary.
2 This estimate is prepared as per P.W.D S.R of 2011-12.
3 This work included under POW 2011-12.
4 The provisions were made in this estimate are necessary and adequate.
5 This works come under B.B.M.P. limits.

Assistant Engineer

Assistant Executive Engineer
Bruhat Bangalore Mahanagara Palike
Vidyaranyapura Sub Division

Executive Engineer
Bruhat Bangalore Mahanagara Palike
Byatarayanapura Division

ADMINISTRATIVELY SANCTIONED FOR Rs. 10,00,000=00
Rupees Ten Lakhs only
Under P1771 POW 11-12
Registered as JC(Y) No. 255 12-13
Subject to conditions contained in enclosed memo JC(Y) No. 255 /12-13
Dt. 14-05-12 Estimate A/Sanctioned
JC/Yel/AA/12-13 No. 255
dated 14-05-12 Rs. 10,00,000=00

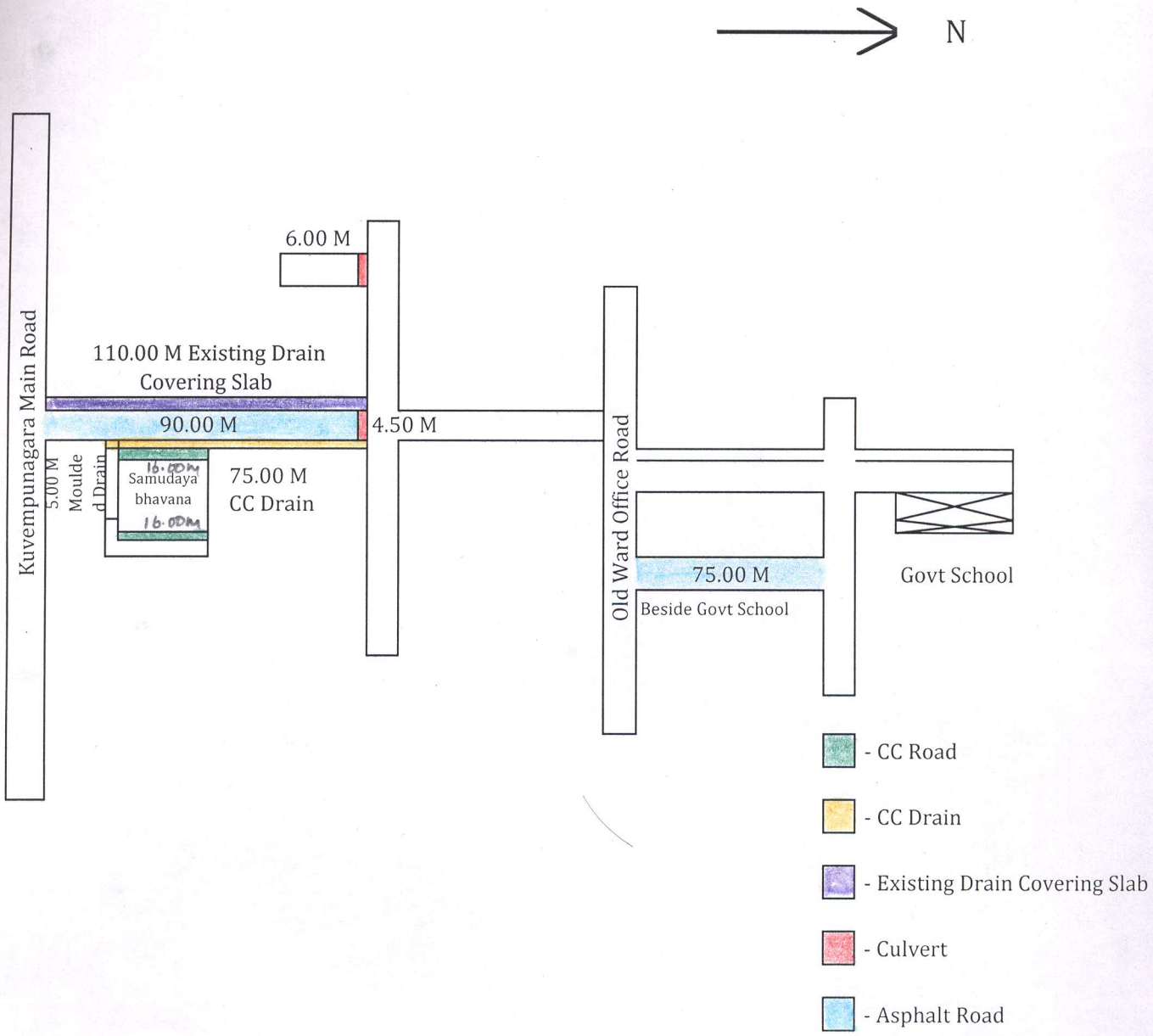
Joint Commissioner
(Byatarayanapura)

Technical Sanction for Rs. 10 00 000=00
Ten lakhs only
under P-1771 POW 11-12
registered as EE No: 163/15-5-12 Subject to conditions contained enclosed memo.
No: 163/12-13 Dr. 15-5-12

AE/JE

EE (BTP. Div.)

Sketch showing the Work of Construction of Moulded Drain in Kuvempunagara 1st Stage near Samudhaya Bhavan Roads in Ward No. 11 (Kuvempunagara), Vidyaranyapura Sub Division.



Junior Engineer
Ward No. 11

Assistant Executive Engineer
Vidyaranyapura Sub Division
BBMP, Bangalore - 97